

IN THE CLAIMS:

1. (Currently Amended) A computer node for operating in a system comprising a plurality of network clusters, wherein a number of network clusters comprise a plurality of computer nodes, the computer node comprising:

a synchronisation unit for comparing network timing information for a first network with network timing information for a second network and for communicating to other computer nodes in the first network a sign of the difference between the first network timing information and the second network timing information to allow the other computer nodes in the first network to alter ~~its~~ their network timing information using directed by the sign of the difference wherein a network timing difference between the first network and the second network is reduced responsive to the sign of the difference received and in sufficiently small predetermined step values in accordance with the sign to avoid loss of local synchronisation with the other computer nodes in the first ~~its~~ network cluster.

2. (Canceled)

3. (Previously Amended) A computer node according to claim 1, wherein the network timing information corresponds to the phase of the network clock.

4. (Previously Amended) A computer node according to claim 1, wherein the synchronisation unit is arranged to provide the sign of the difference to the second network to allow the second network to alter its network timing information to allow the network timing difference between the first network and the second network to be reduced.

5. (Previously Amended) A computer node according to claim 1, wherein the computer node is arranged to be coupled to the first network.

6. (Previously Amended) A computer node according to claim 1, wherein the computer node is arranged to be coupled to the second network via a second computer node.

7. (Currently Amended) A system comprising a plurality of network clusters comprising:

a first network, a second network; and

a computer node having a synchronisation unit for comparing network timing information for the first network with network timing information for the second network and for communicating to other computer nodes in the first network a sign of the difference between the first network timing information and the second network timing information such that a network ~~clock-rate of~~ timing difference between the first network and the second network is reduced by the other computer nodes in the first network responsive to the sign of the difference received and in sufficiently small predetermined step values in accordance with the sign to avoid loss of local synchronisation with the other computer nodes in ~~it's~~ the first network, the reduction of the timing differences being ~~cluster-using~~ directed by the sign of the network timing difference between the first network and the second network.

8. (Canceled)

9. (Previously Amended) A system according to claim 7, wherein the first network has a plurality of nodes and the first network timing information is used to maintain synchronisation of the plurality of nodes, wherein the change in network timing information is sufficiently small to allow the plurality of nodes to maintain synchronisation should one of the plurality of nodes not change its timing information in response to the sign of the difference communicated by the computer node.

10. (Currently Amended) A method for allowing synchronisation of a first network and a second network in a system comprising a plurality of network clusters, wherein a number of network clusters comprise a plurality of computer nodes, the method comprising:

comparing network timing information for the first network with network timing information for the second network; and

communicating to other computer nodes in the first network a sign of the difference between the first network timing information and the second network timing information wherein a network timing difference between the first network and

the second network is reduced by the other computer nodes in the first network responsive to the sign of the difference received and in sufficiently small predetermined step values in accordance with the sign to avoid loss of local synchronisation with the other computer nodes in it's-the first network cluster using, the reduction of the timing difference being directed by the sign of the network timing difference between the first network and the second network.

11. (New) A computer node according to claim 1, wherein the first network comprises a first communication cycle and the second network comprises a second network cycle, the sign of the difference between the first network timing information and the second network timing information indicates that the first communication cycle is ahead of the second communication cycle.

12. (New) A computer node according to claim 1, wherein the synchronization unit is arranged to measure a time between a start of a first communication cycle of the first network and a start of a second communication cycle of the second network.

13. (New) A system according to claim 7, wherein the first network comprises a first communication cycle and the second network comprises a second network cycle, the sign of the difference between the first network timing information and the second network timing information indicates that the first communication cycle is ahead of the second communication cycle.

14. (New) A system according to claim 7, wherein the synchronization unit is arranged to measure a time between a start of a first communication cycle of the first network and a start of a second communication cycle of the second network.

15. (New) A method according to claim 10, wherein the first network comprises a first communication cycle and the second network comprises a second network cycle, the sign of the difference between the first network timing information and the second network timing information indicates that the first communication cycle is ahead of the second communication cycle.

16. (New) A method according to claim 10, wherein the synchronization unit measures a time between a start of a first communication cycle of the first network and a start of a second communication cycle of the second network.